



United States Environmental Protection Agency
Washington, DC 20460

Work Assignment Number
01-03

Work Assignment

☒ Original ☐ Amendment Number

Contract Number
EP-C-08-010

Contract Period 12/7/09 - 11/30/2010
Option Period 1

Title of Work Assignment:
User Assessment of GEO Web Portal

Contractor
Scientific Consulting Group, Inc.

Specify Section and Paragraph of Contract SOW
Task 2.3

Purpose: ☒ Work Assignment Initiation ☐ Work Assignment Close-Out
☐ Work Assignment Amendment ☐ Incremental Funding
☐ Work Plan Approval

Periods of Performance

From: CO Approval To: 01/31/2010

Comments

☐ Superfund

Accounting and Appropriations Data

☒ Non-Superfund

DC (Max 6)	Budget Appropriation (FYs Code (Max 6))	Budget Org/Code	Program Element	Object Class	Amount	(Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1						\$15,400.00			
2									
3									
4									
5									

Authorized Work Assignment Ceiling

Contract Period: 12/1/09 - 11/30/10

Cost/Fee

LOE

Previously Approved

This Action

144

Total

144

Work Plan / Cost Estimate Approvals

Contractor WP Dated :

Cost/Fee:

LOE:

Cumulative Approved:

LOE:

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(Date)

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Verla Sutton-Busby
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Gary J. Foley
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Contracting Official Name

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Contractor Acknowledgment of Receipt and Approval of Workplan (Signature and Title)

Date

**PERFORMANCE WORK STATEMENT Contract Number EP-C-08-010 Scientific Consulting
Group Work Assignment Number: 01-03**

Title: User Assessment of GEO Web Portals

Scope of Work Reference: Task: 2.3

Period of Performance: Date of Issuance through March 31, 2010

Estimated Level of Effort: 144 Hours

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1. Background

The Ad Hoc Initial Operating Capability (IOC) group of Group on Earth Observation (GEO) needs to assess whether the current Global Earth Observations System of Systems (GEOSS) Common Infrastructure (GCI) architecture and interface of the three Candidate GEO Web Portals meet the needs of the potential users of the nine Societal Benefit Areas (SBA) of GEO (<http://www.earthobservations.org/>). This assessment will be used by the IOC to guide ongoing development of the portals in a manner that will ensure that GEO addresses the on-line needs of both the expert user and the novice user in the most effective way.

The desired outcomes of the assessment are to:

1. document the feedback about the success of the search using the candidate portals;
2. provide suggestions for better approaches to the search for specific activities;
3. assess the level of success or frustration during the search;
4. discuss the value of information found in relation to the objectives of the search;
5. provide a list of user reactions to the experience; and
6. computerize sessions and tutorials that will be available to the portal providers and GEO Secretariat for use in enhancing the GEO website and portals.

2. Purpose

The purpose of this work assignment is for the contractor to develop a computerized session that will include a set of tutorials that will test the candidate portals from the perspective of both the expert and novice user in the nine SBAs of GEO. It is expected that a tutorial may individually address more than one SBA. Each tutorial will work through the path(s) that a user may follow to find a variety of information types from GEO and/or registered components.

In addition to guiding the user through the paths and provide an exploratory experience, the tutorial will:

1. elicit feedback about the success of the search;
2. provide information for better approaches to the search;
3. determine the level of success or frustration during the search;,,
4. assess the value of information found in relation to the objectives of the search; and
5. provide a list of user reactions to the experience.

3. Scope of Work

This performance work statement describes EPA requirements regarding services to be rendered by the Contractor. Logistical arrangements for space are being made by members of the IOC Committee. Other logistical matters involving equipment rental, high-speed internet connectivity (preferably not wireless) and staff availability shall be handled under this work assignment. Described below are the major tasks to be performed by the contractor.

4. Tasks

- (1) The contractor shall prepare and submit the draft report from the results of the third round of the usability testing that occurred during the GEO VI Plenary Session Meeting that took place on November 17-18, 2009, in Washington, DC.
- (2) The contractor shall review and edit the Camtasia videos (approximately 55) captured during the third round of usability testing to modified and shortened videos. The contractor also shall prepare one-half page narratives (in electronic form) to accompany each edited video that lists the details of the search (which portal was tested, what keywords were used, which geographic region was selected, and so on). The edited videos and narratives shall be sent to the EPA WA COR by December 31, 2009.
- (3) The contractor shall participate in any IOC Task Force conference calls as requested or needed. The contractor also shall communicate with the portal developers as needed.
- (4) The contractor shall conduct the fourth round of the User Assessment of the GEO Portal during the Federation of Earth Science Information Partners (ESIP) Semi Annual Meeting, in Washington D.C. on January 5-7, 2010. The portal usability study (questionnaire and sample searches) shall be implemented during the ESIP Federation meeting. During the meeting, attendees will be invited to use the portals, conduct a search on their own or a sample search provided by the contractor, and then complete an online questionnaire following their testing of the portal. The questionnaire and sample searches shall also be made available online after the meeting for invited users.
- (5) Logistical arrangements for the ESIP Federation Meeting (are part of the scope of this work assignment). The contractor shall revise the existing online questionnaire incorporating feedback received from the IOC task force and GEO members. The contractor shall provide support for transporting and setting up five computer stations at the ESIP Federation Meeting, connect to a high speed internet connection for each computer (not wireless, if possible), and provide onsite staff to administer the tutorial as needed, assist users, and solicit feedback from users regarding their experiences with the GEO portals. The contractor shall be responsible for payment to the meeting facility for the room rental, internet connection and related audiovisual costs associated with setting up 5 computer stations.
- (6) Also, if requested, the contractor shall have another laptop station set up for attendees to register their data/services with the GEOSS Components and Services Registry. The contractor shall prepare a one-page flyer to promote this capability and shall assist users in registering and tracking their components with GEOSS.

- (7) The contractor shall prepare and submit the draft report from the fourth round of the usability testing that occurred during the ESIP Federation Meeting scheduled for January 5-7, 2010, in Washington, DC.
- (8) The contractor shall review and edit the Camtasia videos (estimating 30) captured during the fourth round of usability testing to modified and shortened videos. The contractor shall also prepare one-half page narratives (in electronic form) to accompany each edited video that lists the details of the search (which portal was tested, what keywords were used, which geographic region was selected, and so on). The edited videos and narratives shall be sent to the EPA WACOR by February 28, 2010.
- (9) The contractor shall work with the EPA WA COR to develop a flyer or brochure for distribution at the ESIP Federation Meeting. The flyer or brochure shall describe the study, its purpose, the location of the computers at the ESIP Federation Meeting, and the dates and times they will be staffed.
- (10) The contractor shall arrange for the setup of five computer stations on January 5 through January 6 to conduct testing for 2 days. Each computer shall be connected to an existing high-speed internet connection so attendees can participate in testing the portals either on their own or using a pre-set sample search for novice users. The contractor shall provide onsite staff to ensure the proper setup of the equipment, to answer queries from the users, and to obtain feedback on the users' experiences. The contractor shall also work with the GEO portal developers to prepare handouts describing their portal functions and capabilities.
- (11) The contractor shall make every effort to collect data from at least 40 of the attendees at the ESIP Federation Meeting. To do so, the contractor shall staff the computers 1 hour before the meeting begins, all day during the meetings, and 1 hour after the meetings end each day. It is expected that attendees will require approximately 20 minutes completing a questionnaire and conducting a sample search; however, some users may be willing to stay online for additional time to test more than one portal. To attract users to the area where the computers are set up, the contractor shall distribute the brochure at the ESIP Federation Meeting registration desk and at the location of the computers. Directional posters also shall be displayed at various locations in the facility announcing the study and location to encourage attendees to participate and provide feedback.

5. Onsite Support

- (1) The onsite contractor shall include three technical staff—two very familiar with EPA and environmental issues and one familiar with online search strategies and database architecture. These individuals shall be onsite at for 2 days eliciting participation and conducting the usability study. The contractor onsite staff shall set up, operate, and troubleshoot the computer equipment, software, and existing

internet connections that shall be used to access the portals at the ESIP Federation Meeting. At this time, the exact location where the computers will be stationed is unknown but they will be set up at the direction of the EPA WA COR.

- (5) The contractor staff shall arrive at the location at least 2 hours before the ESIP Federation Meeting begins each day to set up the equipment and verify that it is working. The contractor shall begin administering a questionnaire and sample searches 1 hour before the first session begins each day and continue until 1 hour after the closing session each day. At the beginning of each day, the contractor shall check the posters to ensure they are visible to attendees and distribute copies of the brochure about the usability study, its location, and hours. For those users who would prefer to provide verbal feedback rather than complete the online questionnaire, the contractor staff members shall have digital recorders that will allow us to capture those responses.
- (6) During the course of the ESIP Federation Meeting, the contractor staff shall provide verbal status reports and updates to the EPA WA COR as needed. Depending on the nature of the reports, the contractor may need to adjust the questionnaire to meet the goals of the study.

6. Schedule of Deliverables

Work Plan Due Within 15 Calendar Days of Receipt of the Work Assignment

Draft Report on Third Round of Usability Testing	December 23, 2009
GEO Portal developers handouts describing their portal functions and capabilities	December 28, 2009
Edited Camtasia Videos and Narratives from Third Round	December 31, 2009
Assist Attendees with Registering their Data/Services on the GEOSS Registry	January 5-6, 2010, or ongoing
Implementation of Usability Questionnaire and Sample Searches during ESIP Federation Meeting	January 5-6, 2010
Draft Report on Fourth Round of Usability Testing	February 21, 2010
Edited Camtasia Videos and Narratives from Fourth Round	February 28, 2010

7. Acceptance Criteria

Final products will be produced by the Contractor upon the EPA WA COR's approval through written technical direction. The Contractor shall provide all materials written as part of these tasks to the EPA WA COR, as per work assignment, in electronic format. Electronic versions shall be compatible with current ORD computer systems (Word and Excel) and software.

8. Management Controls

Periodic meetings between the EPA and contractor staff are encouraged to discuss any questions that may arise during performance or completion of this work assignment. At the EPA WA COR's discretion, these meetings may occur via teleconference or video conferences. The contractor shall document these meetings and submit copies of this correspondence to the EPA WA COR.

The EPA WA COR may identify one or more EPA technical representatives for this work assignment. Interaction between the contractor and any EPA technical representative(s) designated by the EPA WA COR is solely for the purpose of presenting and discussing the information, analyses, results, or presentations related to this work assignment. The interaction will be technical communication vice technical direction. Per the technical direction clause EPAAR 1552.237-71 of the contract, the EPA PO and the EPAWA COR or alternate EPA WA COR are the primary representatives of the Contracting Officer authorized to provide technical direction.

Per the technical direction clause, the CO and PO will be provided with copies of all technical direction.